Capital Planning

INTRODUCTION

The \$3.2 billion FY22-26 Capital Plan will make critical investments in the City's infrastructure in every Boston neighborhood, guided by Imagine Boston 2030 and the schools, streets, arts, climate and resilience plans under its umbrella. Taken together, these initiatives will support Boston's dynamic economy and improve quality of life for residents by encouraging affordability, increasing access to opportunity, promoting a healthy environment, and guiding investment in the public realm.

The Capital Plan moves Imagine Boston 2030 from idea to action. Planned borrowings are expected to increase 18.8% over last year's plan, one-time funding sources are leveraged, and the City continues to collaborate with the Massachusetts School Building Authority on the design and construction of new schools and the repair of existing building systems.

An estimated 90% of the investment in the FY22-26 Capital Plan is aligned with the City's planning efforts:

- The Capital Plan supports a commitment to invest \$1 billion over ten years to bring Boston's school buildings into the 21st century, with the construction of new schools, MSBA Accelerated Repair Program partnerships, completion of projects in the pipeline, school kitchen renovations that support the delivery of fresh, nutritious food, and reserves for future projects identified by BuildBPS community engagement.
- Boston, in collaboration with State and Federal sources, will invest \$1.2 billion implementing the core initiatives

- outlined in Go Boston 2030: streets that are safer for all users of our roads and sidewalks, particularly pedestrians and cyclists; travel that is more reliable and predictable; and quality transportation choices that improve access to interconnect our neighborhoods for all modes of travel.
- Boston will prepare for climate change by investing at least 10% of all new capital funding to open space, infrastructure, and facilities projects that are climate resilient or contribute to making the City more environmentally friendly.
- Setting the stage for planning and early action items for the comprehensive, long-term recovery campus on Long Island to tackle the opioid crisis and when fully permitted move forward with the construction of a new bridge to Long Island.
- The Percent for Art Program, demonstrates the City's leadership and commitment to sustainable funding for the arts by setting aside one percent of the City's annual capital borrowing for the commissioning of public art.

FY22-FY26 EXPENDITURES

The City is responsible for maintaining a large inventory of capital assets, including roads, bridges, schools, parks, libraries, public safety equipment, and more. The City's capital investments enhance our neighborhoods, improve mobility, support the academic agenda of our schools and reinforce public safety with quality emergency response tools.

With Imagine Boston 2030 and other City planning efforts guiding many of the investments in this plan, projects in the FY22-26 Capital Plan are categorized within the Imagine Boston 2030 initiatives below.

Education

The City is committed to investing \$1 billion to modernize Boston's public school infrastructure, and the BuildBPS plan will guide that process. Through a dedication of City capital funds and a strong working relationship with the Massachusetts School Building Authority (MSBA), the plan will more than double the City's capital spending on BPS facilities from FY18 to FY27. The FY22-26 capital plan continues that investment in in BPS projects.

Boston has leveraged MSBA Accelerated Repair Program (ARP) dollars to provide much needed improvements to its schools. This summer, roofs and boilers will be replaced at three schools. Altogether, these projects represent an investment totaling \$7.5 million with \$3.9 million supported by a grant from the MSBA.

This Capital Plan enables the City to invest in BPS projects already in the pipeline:

- Construction will be completed for the new \$137.4 million Boston Arts
 Academy project. The MSBA has committed a maximum project grant totaling \$48.9 million.
- Construction will begin for the new \$193.6 million Josiah Quincy Upper School (JQUS) in Chinatown. The MSBA

- has committed a maximum project grant totaling \$54.1 million.
- Design is underway for the new \$90
 million Carter School building and
 outdoor learning spaces in the South
 End. The project is currently in the
 process for MSBA funding.
- 19 schools will be enhanced this summer with kitchen renovations that support the delivery of fresh, nutritious food. This is the fourth phase of a multi-year kitchen renovation program. The investment will close food security gaps that prevent many children from learning to their full potential.
- To facilitate grade reconfigurations that minimize school transitions for students, BPS will pursue building improvements at various schools, including the McCormack School in Dorchester and Irving School in Roslindale, in line with the goals of BuildBPS.
- New school maintenance initiatives will launch in FY22, including increasing building accessibility, upgrading auditoriums, and improving building interiors and exterior grounds.
- The City will begin masonry and other exterior building repairs at the Bradley School in East Boston, the Mather School in Dorchester, and the Edward M. Kennedy Academy in Fenway, as well as electrical upgrades at the Dever and McCormack schools in Dorchester.

Transportation

Drawing on City, State and Federal sources, the Capital Plan invests \$1.2 billion implementing the core initiatives outlined in Go Boston 2030. Boston strives for streets that are safe for all users of our roads, bridges, and sidewalks, particularly pedestrians and cyclists; travel that is more reliable and predictable; expanded quality

transportation choices that improve access by interconnecting our neighborhoods for all modes of travel; and upgraded capital assets that make travel more reliable and predictable. Driven by these core goals of safety, access, and reliability, the Capital Plan focuses on several key investments.

The Capital Plan makes critical investments to improve safety and accessibility for Boston's most vulnerable street users with a focus on pedestrian ramps and safety interventions on residential streets and in small business districts. In FY22, the City will increase funding for the Pedestrian Ramp program by \$25 million, as part of a commitment to make all pedestrian ramps ADA-compliant by 2030. The capital plan also invests \$2 million to pilot a new Safety Intervention Program for Neighborhood Streets, which will help the City evaluate and quickly respond to all resident 311 safety requests. This complements the existing Vision Zero program, which focuses on proactively redesigning and reconstructing our most dangerous intersections and corridors. In FY22, Vision Zero program will invest \$10.8 million, making targeted safety improvements at corridors and intersections with known safety challenges. The Neighborhood Slow Streets (NSS) program, which implements traffic-calming measures on residential streets, funds construction projects at 10 locations beginning this spring and into FY22 including zones in Highland Park, Chinatown, Mt. Hope, West of Washington, and Grove Hall. In total, 13 Neighborhood Slow Streets will be completed by the end of 2022, three additional areas will be designed in FY22, and additional zones will be selected. As Boston works to expand access and make neighborhoods interconnected for all modes of travel, this Capital Plan invests in the reconstruction of Ruggles Street, Nubian Square, Cummins Highway, Boylston Street, and the transformation of the Northern Avenue Bridge. All of these streets will be designed

and reconstructed with the Complete Streets approach to include new sidewalks, lighting, storm water infrastructure, and upgraded facilities for pedestrians and cyclists.

In FY22, bicycle and pedestrian safety improvements are planned for construction on Tremont Street in the South End, Massachusetts Avenue, south of Melnea Cass Boulevard, and permanent protected lanes on Cambridge Street in Allston. \$500,000 will be invested in the replacement of Bikeshare docking stations based on age and condition.

This Capital Plan also takes the lead on prioritizing reliable bus transit for all commuters. In coordination with the MBTA, this Plan will transform several corridors Citywide to facilitate rapid bus transit, including the construction of dedicated bus lanes on Columbus Avenue and Warren Street among others. To complement the forthcoming Blue Hill Avenue Action Plan, \$5.5 million is dedicated to resurfacing and installing new markings and pedestrian ramps along the entire 4.5 mile Blue Hill Avenue corridor. The City continues to develop plans and designs to widen sidewalks, realign the median, install new crosswalks, and make traffic signal improvements in Egleston Square and redesign Mattapan Square to enable pedestrians to cross Blue Hill Avenue directly from the Mattapan MBTA station and River Street/Cummins Highway.

The Capital Plan invests in design and provides matching funds to unlock Federal and State investment to transform key corridors in the City. The designs focus primarily on stress-free walking, protected bicycling, and public transportation. It also puts an additional emphasis on improving the street infrastructure in parallel with new housing investment in some of our neighborhoods. Key corridors include

Melnea Cass Boulevard, Commonwealth Avenue, Boylston Street, Columbia Road, the Sullivan Square / Rutherford Avenue / North Washington Street corridor, and street designs for the Boston Planning and Development Agency's PLAN initiatives in Jamaica Plain/Roxbury and on Dorchester Avenue. The Capital Plan focuses on adding protected bicycle lanes on every "Great Streets" project, and on off-street Green Links pathways such as the Fenway-Roxbury Connector and the planned new gateway at Arboretum Road, that will create new entrances to the Arnold Arboretum and extend the Blackwell Path south to Roslindale Square. These connective investments are complemented by a \$2.3 million FY22 investment in the Strategic Bicycle Network, which will fund the design and construction of 5 miles of new protected bike lanes over the next two years, part of the City's four-year target of 15 new miles of high-quality protected bike infrastructure.

Through the FY22-26 Capital Plan, the City will also increase asset reliability through investments in bridges, roads, sidewalks, off-street paths, street lighting, traffic signals and building facilities that are essential to the high-quality delivery of services. In FY22, the City plans to invest \$30.0 million in its annual road resurfacing, reconstruction, and sidewalk ramp programs. This Capital Plan invests in upgrades to the North Washington Street Bridge, Dalton Street Bridge and others so that the City's bridges achieve a state of good repair by 2030. By investing in asset management programs for our bridges, street lights, ramps, and pavement markings, among other assets, Boston will continue targeting a state of good repair that ensures the safe and reliable movement of people across the City.

Technology

The City is dedicated to delivering exceptional City services by leveraging investments in technology. In FY22, the City will continue its focus on supporting and developing innovative initiatives and projects across departments while also enhancing its cyber security tools and the resilience of its systems. In line with its multi-layered approach to managing risk, the City will make investments to ensure continuity of operations and recovery of data in the event of a disaster. The City will also devote new funding to its five focus areas including: Core Infrastructure, Enterprise Applications, Digital Engagement and Service Delivery, Data Analytics, and Broadband and Digital Equity.

In FY22, the City will continue investing in the Boston Fiber Network (BoNet) to improve Boston's fiber backbone and switching infrastructure. This \$14 million network build-out will connect the remaining Boston Public Schools with City fiber, as well as public safety locations, public housing developments, and other sites. Altogether, the project aims to connect ~ 170 City buildings, providing broadband service to the City's public schools, public works and public housing, and strengthening public safety communications.

In FY22, the Department of Innovation and Technology will partner with other City departments, including Inspectional Services, Neighborhood Development, Transportation, and the Public Health Commission, to support and develop innovative technology initiatives and projects.

Open Space

Imagine Boston 2030 calls for the City to strengthen Boston's existing park system and invest in new open spaces. Through the use of Winthrop Square proceeds, City capital dollars, and leveraging external funds, the City continues to take action in implementing Imagine Boston 2030's Open Space goals including investing in Franklin Park as a keystone park for the city, completing the Emerald Necklace, and restoring Boston Common to its full vibrancy.

The Franklin Park Master Plan and Moakley Park Master Plan together serve as anchor projects to launch the City's effort to complete the Emerald Necklace. The community engagement processes for the Franklin Park Master Plan is nearing its final stages, with a completed plan expected in summer of 2021. The Master Plan will reimagine Franklin Park as a signature park for all Boston residents according to the design concept's "Four Big Ideas": Amplify Magnet Destinations, Clarify Movement, Connect and Activate the Edges, and Unify the Park. In parallel to the community engagement process, the Parks and Recreation Department has completed key improvements to the park including repaving the pathway network and enhancing the tree canopy care program. The City has committed to a \$23 million investment funded by the sale of the Winthrop Square garage to implement the Franklin Park Master Plan. The full Moakley Park design is nearing completion as well, with construction expected to begin in 2023.

The Boston Common Master Plan community engagement process is nearing completion as well, with a completed Master Plan expected in summer of 2021. The City has committed \$23 million from the Winthrop garage sale to augment the current historic levels of investment in Boston Common to fully renovate America's First Park. This investment will ensure future generations will enjoy the park in its full vibrancy.

The FY22-26 Capital Plan continues investments in the City's parks to ensure

Boston's open spaces are among the Nation's most accessible and equitable, including \$39.5 million of new capital funding for parks throughout the city. The City will invest \$15 million to reimagine Copley Square Park, one of Boston's most recognizable and popular places. The project will enhance the park's ability to accommodate large events, mitigate the heat island effect, and provide a welcoming space for Boston's residents and visitors alike to gather and relax. The City will also invest \$6 million for the complete renovation of Malcolm X Park, \$1.8 million to rehabilitate the pathways in Dorchester Park and improve accessibility, \$2 million to reconstruct sports fields in the fourth and final phase of the Harambee Park renovation, and many other projects.

In the FY22 Capital Plan, the Parks and Recreation Department takes important steps to increase Boston's climate readiness, as guided by Climate Ready Boston. This includes \$2.2 million to continue engineering and design studies to support the transformation of Moakley Park into a more vital recreation space and at the same time designing it to protect the City from the effects of sea level rise. The FY22 plan also includes \$2.5 million for the engineering design of improvements to Christopher Columbus Park. The renovation will elevate the site, improving its function as climate resilience infrastructure while improving recreation areas.

One hundred percent of Bostonians live within a ten-minute walk of a park, but those spaces are only truly equitable if they serve the diverse needs of all our residents. The City recognizes the need for inclusive design and has created robust budgets for park renovation projects including Malcolm X Park in Roxbury, Cutillo Park in the North End, Millennium Park in West Roxbury, Coppens Square in Dorchester, McLean Playground in East Boston, and Ringer Playground in Allston/Brighton. In

addition, the FY22-26 plan proposes new investments in athletic field lighting and playground improvements in more than a half dozen locations. The Capital Plan also supports investments in the renovation and renewal of playing courts (basketball, tennis, and street hockey) and playground safety surfacing in various parks.

Energy and Environment

As part of Boston's implementation of Imagine Boston 2030, the FY22-26 Capital Plan includes investments to support a healthy environment, reduce energy consumption and greenhouse gas emissions, and prepare for climate change. Leveraging outside funding, the Capital Plan allows for development of more detailed climate plans for Boston neighborhoods, especially those most at risk for coastal flooding, as recommended in Climate Ready Boston. These long-term plans, early actions, are essential for protecting the safety and vitality of existing residents, businesses, and institutions, and for ensuring the implementation of continued growth and development. In FY22, the City will increase its capital commitment to the Climate Ready Boston Harbor Study by \$1 million. These funds will supply matching funds to the U.S. Army Corps of Engineers, which will conduct the study to reduce Boston's vulnerability to coastal flooding and sea-level rise.

The City has committed 10% of new capital funding to climate resilience projects. In FY22, the Climate Resilience Reserve is increasing by \$2 million. These funds will support adding climate resilience features to existing project. For example, a play lot renovation project could become more resilient through the addition of a storm water retention system. If the project budget cannot accommodate the additional scope, the Resilience Reserve can be used to fund the improvements without sacrificing the project's original goals.

To preserve the city's natural areas and continue to combat the urban heat island effect, the department is investing \$750,000 to rehabilitate the Mattahunt Woods, a valuable urban wild of secluded forested wetlands located in Mattapan.

The City has committed \$10 million for the development of a new linear park along Fort Point Channel. This new park will protect the surrounding properties from expected sea level rise through the year 2070. The City has applied for a FEMA mitigation grant.

Renew Boston Trust has systematically identified energy projects in the City's 300+ buildings to both lower energy bills and reduce emissions. The City finances the program through general obligation bonds, paid for in part from reduced energy consumption at City departments.

By utilizing contracts with Energy Service Companies (ESCOs) that guarantee the energy savings generated by the projects, the City will sufficiently offset anticipated debt service costs. A \$10.7 million Phase 1 construction project began in February, 2019 and has been completed. Leveraging the experience gained from this pilot project, the City began construction on Phase 2, which is currently underway. The design process of Phase 3 has begun and will include projects in Boston Public Schools.

Health

To encourage a healthy environment, including safe streets and communities, Boston is renovating several neighborhood community centers to serve residents' needs. Major renovation work will continue at the BCYF Curley Community Center, in South Boston. The heavily used building, which spans nearly a quarter mile on the South Boston beach front, will be completely refurbished. In East Boston, an \$8.9 million renovation to the BCYF Paris Street Pool will be completed in FY22 with

new family changing rooms, refreshed existing locker rooms, creation of a new front entrance, and upgrades of all building and pool systems. The pool is expected to reopen in summer 2021. Design will also begin for a new North End Community Center, and funding for improvements to the pool at BCYF Marshall Community Center are also included.

Additionally, a \$12.7 million investment will be made at BCYF Mattahunt for interior renovations to the lobby, gymnasium, community room and computer lab, \$1 million at BCYF Roslindale to begin designing interior and exterior renovations and other facility upgrades to enable using the facility as a sheltering site year-round, and continuation of the annual \$1 million Youth Budget.

The Capital Plan includes \$23.5 million to implement upgrades to the Emergency Medical Services (EMS) radio system. Construction will begin to renovate a facility in West Roxbury as a new EMS training academy along with a new ambulance bay.

Construction will conclude in FY22 on a permanent Engagement Center, a new facility that will enhance recovery support services. Renovation work will be completed at the Woods Mullen Shelter. The scope of work includes the installation of a new elevator, relocating the entryway, and renovating bathrooms.

The City intends to replace the former Long Island Bridge with a new structure. Restoration of the bridge will allow the City to locate recovery services on Long Island. The Capital Plan includes \$22 million for initial design work and for the preservation of buildings on Long Island that will be used as part of the future recovery campus.

Housing

In 2014, the City released Housing a Changing City: Boston 2030, the City's comprehensive plan to accommodate Boston's rapid growth and stabilize the housing market by 2030. Through the strategies outlined in the plan, more than 36,000 new housing units have already been completed or are currently in construction, and almost 31,000 are under review. The City combines General Fund dollars with federal grants, state grants, and developer fees to leverage a wide variety of sources to invest in the creation and preservation of affordable housing citywide.

Recognizing that infrastructure investments are a key to housing development, the Capital Plan includes \$5 million for an infrastructure fund to support the creation of affordable housing. The Capital Plan also commits \$49 million to support necessary public infrastructure improvements in partnership with the Boston Housing Authority (BHA) including a \$19 million investment in Phase 3 of the Orient Heights public housing redevelopment in East Boston. An additional \$10 million will be used to upgrade elderly/disabled public housing units in several BHA communities, including Patricia White in Brighton, St. Botolph in the South End, and the Doris Bunte Apartments in Egleston Square.

\$1 million will be invested in the reconstruction of roads and sidewalks in the Whittier Street housing development in conjunction with a \$30 million Housing and Urban Development grant to revitalize the development and surrounding neighborhood.

Arts and Culture

The Mayor's Office of Arts and Culture released the City's first cultural plan, Boston Creates, in 2016, which calls for increased support to Boston's arts and culture

ecosystem. The Percent for Art Program is a key policy outcome of this planning process. The City projects to borrow \$280 million in FY22 to support the Capital Plan, and will invest one percent, or \$2.8 million, in public art projects in FY22.

The FY22-26 Capital Plan continues support for revitalizing library branches throughout Boston's neighborhoods. In FY22, programming studies for replacing branch libraries in Codman Square and South Boston will be underway.

Construction will be completed in FY22 on a major renovation of the Roslindale Branch and of a new Adams Street Branch library that will have a larger facility, new meeting rooms, an enhanced teen space, and redesigned outdoor spaces.

The design and construction of a major renovation and building addition to the Faneuil Branch Library is also underway. The renovation will focus on accessibility and new programming space.

In FY22, design activity will begin on a new building to replace the current Fields Corner Branch Library.

In FY22, after an 18-months long \$15.7 million renovation, the Rare Books Departments will reopen. The renovated and modernized facility will enable the Boston Public Library to preserve its valuable and historic special collections that includes nearly 250,000 rare books and 1 million manuscripts. The renovation includes major environmental and mechanical improvements to regulate temperature and humidity control of the department's collection storage areas, staff spaces, conservation lab, and public reading room. Ultimately, the project will increase accessibility to the collection and ensure its preservation for future generations.

Economy

As a \$3.2 billion investment in the City's assets, the Capital Plan supports economic

growth in Boston by creating construction jobs and investing in infrastructure that unlocks economic activity. The Capital Plan also supports targeted investments to strengthen Boston's core and small businesses, as called for in Imagine Boston 2030. For example, Phase 2 roadway improvements in Nubian Square, with geometric changes, new traffic signal equipment and timing, bike lanes, and streetscape improvements, will improve access and safety. This project also begins implementation of the Go Boston 2030 goal to make public realm improvements in every Main Streets district in Boston by 2030.

Public Safety

As part of the Imagine Boston 2030 initiative to reduce cancer risks for firefighters, the Capital Plan includes health and safety improvements to firehouse projects. The new stations for Engine 42 and Engine 17 will be among the first firehouses in the nation to reflect these enhancements. The new Engine 42 firehouse in Egleston Square will be completed this fall and construction will begin on a new firehouse for Engine 17 in Dorchester. The City is also renovating neighborhood existing fire and police stations. In East Boston, construction will be completed on a new police station, a \$29.9 million facility that will replace the existing A-7 station.

In FY22, design work will begin on HVAC updates to the police training academy; construction work will get underway to replace the roof and elevators at Police Headquarters. The Police Department is in the final stages of upgrading their radio system. The roof at Fire Department headquarters and at Fire Alarm will also be replaced.

The Fire Department will purchase 3 pumper trucks and 2 ladder trucks and 1

rescue truck in line with their annual replacement program. The FY22 Capital Plan includes \$46 million to upgrade the Fire Department's radio system. This project will leverage work done by the Police Department upgrading their radio system.

Government Effectiveness

The City Hall Master Plan was launched to allow Boston to rethink the way the public interacts with government in City Hall and to enliven the plaza.

The current renovation project will deliver updated civic spaces and programming capabilities year-round. New infrastructure will make the plaza more environmentally sustainable. Specific improvements include connecting Congress and Cambridge Streets with an accessible sloped promenade, shady seating and gathering areas, play space, and public art space. The North entrance of City Hall will also be reopened improving public access to the building. Phase 1 is expected to be completed in mid-2022.

In addition, an overhaul of City Hall's HVAC system and elevators is currently underway.

FY21-26 PROJECT HIGHLIGHTS AND SEQUENCING

Project	Budget			Fiscal	l Year		
Community Spaces		2021	2022	2023	2024	2025	2026
Roslindale Branch Library Renovation	\$ 11,660,000						
Adams Street Branch Library	\$ 18,300,000						
BCYF Paris Street Pool	\$ 8,900,000						
BCYF Curley Community Center	\$ 30,000,000						
Faneuil Branch Library	\$ 14,000,000						
City Hall and City Hall Plaza	\$ 124,323,273						
South Boston Branch Library	\$ 100,000						
Fields Corner Branch Library	\$ 12,100,000						
Schools						-	-
Boston Arts Academy	\$ 137,370,916						
Mandela Athletic Complex Locker Rooms	\$ 8,030,325						
Carter School	\$ 89,564,411						
Josiah Qunicy Upper School	\$ 193,591,467						
Public Safety							
Engine 42	\$ 23,560,000						
East Boston Police Station	\$ 29,900,000						
Engine 17	\$ 24,700,000						
Parks							
Smith Playground Phase II	\$ 5,480,000						
McConnell Playground	\$ 8,780,000						
Harambee Park Phase 4	\$ 2,090,000						
Mattahunt Woods Preservation	\$ 750,000						
Copley Square Park	\$ 15,500,000						
Ceylon Park	\$ 4,100,000						
Boston Common Master Plan	\$ 23,000,000						
Franklin Park Master Plan	\$ 23,000,000						
M o akley Park	\$ 7,200,000						
Fort Point Channel Park	\$ 20,000,000						
Streets							
New England Avenue	\$ 1,500,000						
Emerald Necklace	\$ 11,000,000						
Blue Hill Avenue Corridor Transportation Action Plan	\$ 300,000						
Egleston Square	\$ 500,000						
Cummins Highway	\$ 4,000,000						
Northern Avenue Bridge	\$ 100,000,000						
Long Island Bridge Replacement	\$ 108,758,144						
North Washington Street Bridge	\$ 218,957,519						
*Indicates new project in FY22		Study					
		Design					
		Construct	tion				

FY22 Expenditure Allocation

The City estimates FY22 capital expenditures from all sources will total \$551.4 million (see Figure 2).

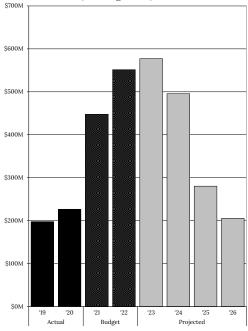


Figure 2 – Capital Expenditures FY19-FY26

All projects in the Capital Plan are categorized as Upkeep, Upgrade, New/Major Renovation, Planning or Matching Funds. The City tracks the overall distribution of these categories to maintain a balance between the upkeep of existing assets and the expansion or introduction of new ones.

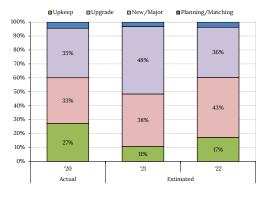


Figure 3 – Capital Expenditure Allocation FY20-FY22

Upkeep represents projects that maintain the City's assets, a fundamental priority of the Capital Plan. In FY22, 17% of projected spending supports Upkeep projects. These include roof and masonry repairs, the replacement of play equipment in parks, HVAC and boiler replacement, and critical repair funds for departments to address relatively small but vital repair projects not covered by routine maintenance. A substantial portion of the Upkeep category supports on-going bridge, street, sidewalk, and street lighting repairs that ensure the City's roads and sidewalks are safe and in good condition.

Upgrade represents projects that improve existing assets by adding new capacity or innovations. This year's upgrade allocations account for 43% of projected spending, and includes projects such as equipment upgrades for public safety radio systems.

New/Major Renovations represents 36% of FY22 allocations. New facilities and rehabilitation projects for schools, libraries, parks and community centers enable the City's facilities to adapt to fit the needs of today's programs, improve the 'green' performance of facilities, and extend the useful life of older assets. Highlights in this category include a new fire house at Engine 42 in Roxbury and a major renovation of the BCYF Curley Community Center in South Boston.

About 4% of the FY22 budget is assigned to matching fund requirements and planning projects. Comprehensive planning projects, which analyze a group of buildings or program needs, provide the groundwork for targeted investments in the categories of Upgrade and New/Major Renovations. Projects in this category include funds for a master plan of Boston Common and a transportation studies including the East Boston Transportation Action Plan. The Matching fund category includes projects in which the City covers the costs of design and engineering services. These expenditures are able to leverage State and

Federal construction funds on projects such as the new North Washington Street Bridge.

FINANCING THE FY22-FY26 CAPITAL PLAN

The Capital Plan is financed with general obligation bonds issued by the City, other City funds, State grants, Federal grants, and private grants.

General Obligation (G.O.) Bonds

General obligation bonds represent 67.2% of all project funding. This year's plan assumes \$1.58 billion in new general obligation borrowings over the next five years, an 18.8% increase over last year's plan. This borrowing level remains sustainable within the City's debt affordability policy.

State and Federal Funds

State and Federal financing represent 23.6% of all project funding. Programs, such as the School Building Assistance program, Chapter 90 and the Transportation Improvement Program, provide key resources for Boston's Capital Plan. Funds for capital financing are currently estimated at \$370.6 million from State programs and \$394.4 million from Federal programs.

School Building Assistance Program

The School Building Assistance (SBA) program, administered by the Massachusetts School Building Authority (MSBA), is an important revenue source for school renovation and construction. Annually, the MSBA accepts new project requests from cities, towns, and school districts, and if a project is ultimately approved, the MSBA pays 40% to 80% of eligible project costs.

The MSBA operates two major programs – the Core Program and the Accelerated

Repair Program (ARP). Major renovation and new construction projects are funded through the Core Program. The ARP funds roof, boiler, and window replacement projects in school buildings that are otherwise sound.

The City currently has three projects in various phases of the Core Program -- the Boston Arts Academy, the Josiah Quincy Upper Pilot School, and the Carter School.

The MSBA has approved a maximum project grant totaling \$48.9 million for the Boston Arts Academy project, which covers 35.6% of the current \$137.4 million project budget. Construction on the new school building will be completed in spring 2022 and will open for students in September 2022.

The Josiah Quincy Upper School project is in final design; construction is expected to begin in FY22. The MSBA has approved a maximum project grant totaling \$54.1 million which covers 27.9% of the \$193.6 million project budget.

The Carter School project is currently in design. During the first half of FY22, the City expects to submit a schematic design to the MSBA and enter into a Project Funding Agreement with the MSBA by the end of FY22. The current estimated cost of the project is \$89.6 million.

The City has projects underway at five schools through the Accelerated Repair Program. Construction will begin in summer 2021 at three locations. The other two school projects will see construction begin during summer 2022.

Transportation Infrastructure Enhancement Fund

An Act was approved in August of 2016 that establishes oversight and regulation by the Department of Public Utilities over transportation network companies. As part of its oversight the Transportation Infrastructure Enhancement Fund was

established. Annually each transportation network company is required to submit a per-ride assessment of \$0.20 based on number of rides in previous year and half of the assessment will be proportionately distributed to cities and towns based on the number of rides that originated within the city or towns with the funding used to address the impact of the transportation network services on municipal roads, bridges and other transportation infrastructure. The fee will be discontinued as of January 1, 2027.

The FY22-26 Capital Plan includes \$15.2 million in revenue from this source.

Chapter 90 Funds

Administered by the Massachusetts Highway Department, Chapter 90 funds are allocated by formula through State bond authorizations and through the State budget to all cities and towns in the Commonwealth. The City uses Chapter 90 funds to support its roadway resurfacing and reconstruction programs as well as its sidewalk reconstruction programs. The City anticipates an allocation of approximately \$14.7 million in FY22.

Transportation Improvement Program (TIP)

The Transportation Improvement Program is a statewide road and bridge construction advertisement program developed under the management of the Massachusetts Department of Transportation (MassDOT). It includes both local and State owned roads and bridges. The TIP's funding sources include State-issued general obligation bonds and Federal funds made available through the Federal Highway Administration and other Department of Transportation agencies.

Other Funds

Other Funds is a revenue category that includes both City and non-City sources.

City sources of Other Funds include transfers from the Surplus Property Fund and the Parking Meter Fund.

Other Funds Summary

(in millions)

	\$ Amount
Parking Meter Fund	183.80
Surplus Property Fund	70.00
Utility Company Grants	15.34
Boston Water & Sewer	4.00
BPDA	3.04
Fund for Parks	2.50
Other Non-City	19.64
Total	\$298.32

Figure 4 - Other Funds Summary

FY22-FY26

In FY22, the City proposes transferring \$8.6 million from the Parking Meter Fund to the Capital Grants Fund and appropriating it for projects including Vision Zero:
Neighborhood Slow Streets, Dedicated Bus Lanes, and Parking Meter and School Zone Signal upgrades. Using the Parking Meter Fund revenue in this way allows the City to make increased investments in infrastructure. Through this appropriation, the City will address important transportation capital needs.

Non-City sources of Other Funds include grants from the Boston Planning and Development Agency for roadway construction or other capital projects, as is the case with Harrison Avenue. Other Funds also include incentive rebates provided by utilities to carry out energy efficiency projects. Altogether, these City and non-City sources of capital funds are estimated at \$298.3 million.

CAPITAL PLANNING PROCESS

Capital needs and resource availability are assessed annually through a capital planning process that results in a five-year Capital Plan. The first year of the spending plan constitutes the City's capital budget. Expenditures against this budget are closely monitored throughout the year. To

emphasize the balance between needs and resource availability, the budget document (in Volumes 2 and 3) includes both capital authorizations and expenditure projections for each project.

The annual capital planning process begins with a capital improvement project request period during which all departments have an opportunity to identify their facility, equipment, infrastructure, and planning needs in a systematic manner, and to submit their proposals for funding consideration. The development of department project requests may involve both internal assessments of current needs and a review of external constituent requests.

A project request includes a cost estimate, a description of the proposed scope of work, and additional descriptive information to help OBM evaluate it.

Proposed projects must account for shortterm and long-term effects on the City's operating budget. Accordingly, project requests that OBM determines may impact the City's operating budget are subject to additional review to determine the anticipated effect on personnel, utilities, maintenance, and supply costs, as well as expected changes in service demand or delivery of departmental programs. As a practical matter, it is assumed that certain types of projects such as energy conservation and energy efficiency projects (e.g. heating system upgrades or roof and window replacements) provide operating budget savings. OBM works with departments to measure these savings.

OBM reviews project proposals to determine the extent to which private purposes or benefits may exist; this review allows the City of Boston to maintain its tax-exempt financing status.

Proposals with strong alignment to Citywide planning efforts, such as Imagine Boston 2030 and climate resilience are prioritized for near-term investment.

Expertise from the Department of Innovation and Technology is leveraged to evaluate the feasibility, cost, and implementation plan for IT investment proposals City-wide. Investments with strong return-on-investment, alignment to master plans, and support of legal ordinances are prioritized using an automated scoring system that results in metric-based recommendations.

New capital requests that are recommended for funding are placed into a multi-year spending plan along with previously authorized projects. The Mayor submits the Capital Plan to the City Council each year. The City Council, in turn, holds public hearings to consider project authorizations. This year's Capital Plan identifies 356 new and continuing projects and proposes \$285.2 million in new bond authorization and an \$8.6 million appropriation supported by the Parking Meter Fund.

Descriptions of all 356 projects can be found in Volumes 2 and 3 of the Budget. Project descriptions include authorizations and funding sources, projected expenditures, scope of work summary, and an indication of whether or not the project generates a near-term operating budget impact.

Operating Budget Impacts

Determining the impact that proposed capital investments will have on the City's operating budget (personnel, contracted services, equipment and utilities) is essential to the capital budgeting process. Many capital projects, such as those that replace aged or outdated equipment with modern, more efficient versions, save the City money in future operating costs; others, such as those that allow the City to expand programming or establish a stronger presence in different neighborhoods, may entail future operating costs. Understanding the balance between future savings and future costs resulting

from these capital projects is vital to maintaining the City's long-term financial health.

In Volumes 2 and 3 of this document, each capital project summary indicates whether or not there is an operating impact associated with the project.

While most capital projects can be assumed to have a marginal impact on energy savings or personnel demands, only those projects that will likely result in an increase or decrease in a budget appropriation are included here.

Savings

The Capital Plan supports investments that will decrease operating expenses by reducing costs associated with emergency repairs, maintenance of old systems, and energy inefficiency. A substantial portion of the Capital Plan is focused on these types of basic facility improvements.

Through an Executive Order relative to climate action, the City has committed to designing new buildings and selected major renovations to the standards required to attain U.S. Green Building Council LEED (Leadership in Energy and Environmental Design) certification.

By far the largest operational savings comes from the conversion of street lights to newer fixtures using Light Emitting Diode (LED) technology. To date, the City has performed over 51,000 streetlight LED retrofits. As a result, the FY22 Budget reflects energy avoidance of 37.4 MWh, a roughly \$6 million non-personnel expense reduction directly attributable to this work.

Renew Boston Trust has systematically identified energy projects in the City's 300+ buildings to both lower energy bills and reduce emissions. The City finances the program through general obligation bonds, paid for in part from reduced energy consumption at City departments.

A \$10.7 million Phase 1 construction project completed in FY20 and will result in nonpersonnel operating expense savings of more than \$600,000 annually. Implementation of the \$24 million Phase 2 investment will increase estimated operating expense savings by \$900,000 annually. A robust measurement and verification program was also established to ensure non-personnel expense savings truly offset fixed debt service costs related to the capital project. Implementation of a \$24 million Phase 3 is also in development. The City will implement the program through contracts with Energy Service Companies (ESCOs) that will provide financial guarantees that the energy savings generated by the projects will be sufficient to cover anticipated debt service costs.

Costs

Increases in operating expenses expected as a result of capital projects are primarily driven by two areas: an expansion of the City's IT infrastructure and the addition of buildings to the City's portfolio.

The ongoing \$128 million investment in radio system upgrade projects will require the procurement of compatible handheld units and related technology to achieve optimal functionality. The majority of these costs impact the City's lease/purchase program, primarily for public safety departments and the Boston Public Health Department. The FY22 lease/purchase plan strategically includes 285 fully-compatible portable radios totaling approximately \$1.2 million specifically for public safety departments.

Many of the projects identified in the Department of Innovation and Technology (DoIT)'s capital budget replace legacy systems, and in some cases they include an expansion of infrastructure, as well. Annual licensing fees to support the ongoing maintenance and upgrades of new software is typically required, and additional

personnel are sometimes needed to ensure the new software meets the City's needs. For FY22, the Office of Budget Management partnered with DoIT to perform costbenefit analyses for all new technology proposals, prioritizing funding for proposals with positive return on investment calculations, among other factors.

DEBT MANAGEMENT POLICIES AND DEBT IMPLICATIONS OF THE PLAN

Effective debt management ensures that the City can meet its capital infrastructure and facility needs. Debt management requires a series of decisions about the amount, timing, purposes and structure of debt issuance. Long-term debt related to capital investment has two main purposes:

- (1) It finances acquisition, construction, repair, and renovation of City-owned buildings and equipment that are necessary to provide public services; and
- (2) It finances infrastructure improvements to ensure the City's continued growth and safe roadway conditions.

The Treasury Department manages all borrowings according to the City's debt management policies. These policies address issues such as debt affordability and limitations on the level of variable rate debt the City will use. The City's goals are to rapidly repay debt, maintain a conservative level of outstanding debt, and ensure the City's continued positive financial standing with the bond market.

Key components of the debt management policies ensure that:

- combined net direct debt does not exceed 3% of taxable assessed value;
- at least 40% of the overall debt is repaid within five years and 70% within ten years;

- annual gross debt service costs do not exceed 7% of general fund expenditures;
- variable rate debt does not exceed 20% of the City's total currently outstanding bonded debt (the City has no variable debt).

For further discussion of the City's financial policies and management controls, refer to the chapter on Financial Management.

The City's debt service forecast assumes general obligation borrowing of \$280 million in FY22, and \$325 million annually for FY23 through FY26. The debt tables at the end of this chapter detail the City's outstanding debt service obligations and demonstrate the City's rapid retirement of its debt.

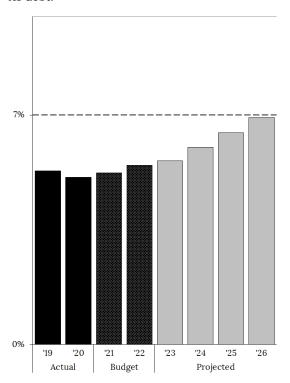


Figure 5 – Gross Debt Service as a Percent of Total General Fund Expenditures
FY19-FY26

The City's gross debt service requirement will remain under 7% of total General Fund expenditures through FY26 (See Figure 5).

The ratio of debt service to the City's primary revenue source, the property tax levy, is projected to increase through FY25 (See Figure 6). Even with the increase, the ratio is not expected to exceed the City's policy ceiling.

The City's current overall debt burden (net direct debt to assessed property value of \$179.79 billion) is approximately 0.69% as of December 1, 2020. The City's net direct debt per capita currently stands at approximately \$1,742 as of December 1, 2020.

Boston has been conservative about assuming long-term debt and aggressive about retiring debt expeditiously. Over 40% of the City's outstanding debt will be retired within the next five years.

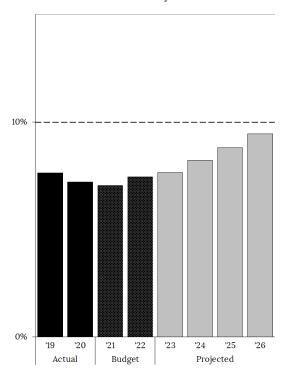


Figure 6 – Gross Debt Service as a Percent of the Net Property Tax Levy

FY19-FY26

In December, 2020, Moody's Investors Service and Standard & Poor's reaffirmed Boston's credit rating at Aaa, and AAA, respectively. A bond rating is a statement of credit quality and is analyzed when determining the interest rate that should be paid for a municipality's bonds. A higher bond rating translates into lower interest rates and real dollar savings for the City.

Capital Project Financing

Fiscal Years 2022 - 2026

	Existing Authorization	FY22 Authorization	FY23-26 Authorization	State	Federal	Other	Trust	Total
Boston Centers for Youth and Families	56,431,300	15,200,000	ı	1	ı	1	I	71,631,300
Boston Planning and Development Agenc	3,975,000	ı		300,000	1	ī	ı	4,275,000
Boston Public Library	70,310,767	5,800,000	38,983,733	1	1	262,500	ı	115,357,000
Boston Public Schools	366,037,268	49,934,808	135,039,998	171,854,035	ı	13,060,000	1	735,926,109
Department of Innovation and Technolog	86,198,254	17,727,644	2,844,258	ı	ı	ı	1	106,770,156
Emergency Management	1,500,000	1	ı	ı	ı	ı	1	1,500,000
Environment Department	50,298,000	3,000,000	175,000	1,088,080	2,500,000	8,000,000	1	65,061,080
Fire Department	70,660,000	54,400,000	3,781,083	ı	ı	206,614	1	129,047,697
Neighborhood Development	45,600,000	24,000,000	1	ı	ı	ı	1	69,600,000
Office of Arts & Culture	7,605,000	4,000,000	4,800,000	ı	ı	ı	1	16,405,000
Office of New Urban Mechanics	200,000	ı	1	ı	ı	ı	1	200,000
Parks and Recreation Department	139,305,203	39,825,000	13,848,957	18,390,173	75,694,180	53,034,455	ı	340,097,968
Police Department	93,870,000	970,000	6,200,000	ı	ı	ı	ı	101,040,000
Property Management Department	194,790,500	15,000,000	1	ı	ı	4,023,273	ı	213,813,773
Public Health Commission	63,646,000	20,766,000	1	ı	1	ı	1	84,412,000
Public Works Department	335,689,000	20,610,000	36,095,000	144,521,648	309,779,418	160,477,138	ı	1,007,172,204
Transportation Department	52,887,312	14,000,000	11,746,720	34,452,387	6,418,394	59,252,262	1	178,757,075
Total	1,639,003,604	285,233,452	253,514,749	370,606,323	394,391,992	298,316,242	1	3,241,066,362

City of Boston Outstanding Principal by Purpose as of December 1, 2020

		Percent of
	Outstanding @	Total Outstanding
	December 1, 2020	Debt
Purpose for Which Issued:		
General Purpose	837,527,479	69.2%
MCWT	12,448,409	1.0%
Economic Development	8,132,026	0.7%
State Urban Development	4,366,958	0.4%
Schools	3,609,620	0.3%
Public Buildings	183,269,565	15.2%
Public Works	155,774,611	12.9%
Cemeteries	4,419,302	0.4%
TOTAL:	\$ 1,209,547,970	100.0%

t Service Requirements Summary FY19 - FY26	
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	Actual FY19	Actual FY20	Projected FY21	Projected FY22	Projected FY23	Projected FY24	Projected FY25	Projected FY26
Gross Debt Service Requirements - Bonded Debt;								
Total Principal:	125,831,183	125,914,890	124,513,916	138,878,237	150,638,051	164,392,818	204,378,094	208,138,700
Total Interest:	56,571,730	57,052,744	67,702,031	69,083,562	70,754,281	80,167,415	88,713,741	96,343,032
(1) Total:	182,402,913	182,967,634	192,215,947	207,961,799	221,392,332	244,560,233	293,091,834	304,481,732
Less: Revenue Deemed Available from Related Sources:								
(2) Premium, Subsidies, Other	3,455,802	3,357,855	3,001,529	2,853,141	2,369,144	1,864,633	1,342,571	799,967
Renew Boston Trust - Energy Savings	0	0	627,425	909,073	2,250,000	2,950,000	2,875,000	2,800,000
Accrued Interest	0	0	0	0	0	0	0	0
(3) Irrigation Project	9,149	0	0	0	0	0	0	0
(4) 1010 Massachusetts Avenue Project	1,954,914	1,924,363	2,409,288	2,644,951	2,089,269	0	0	0
(5) Pension Management System	1,902,668	1,903,312	1,904,187	893,752	640,475	45,394	45,376	0
Sinking Fund for November 2009 QSCB	0	0	0	0	0	0	20,000,000	0
Plus: Interest on Temporary Loan Notes and Additional Items.								
Revenue Anticipation	0	0	2,443,000	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000
Cost of Issuance	109,856	109,318	500,000	500,000	500,000	500,000	500,000	500,000
Lease Payment for Bolling Municipal Building	638,000	638,000	0	0	0	0	0	0
(6) Sinking Fund for Nov., 2009 QSCB	1,454,545	1,454,545	1,454,545	1,454,545	1,454,545	1,454,545	363,637	0
Total Debt Service/Budget Summary:	177,282,780	177,983,967	188,671,063	205,615,427	218,997,990	244,654,751	272,692,523	304,381,765
Less Additional Adjustments:								
School Construction Assistance	5,107,351	2,461,330	0	0	0	0	0	0
Total Net Debt Service Requirements:	172, 175, 429	175,522,637	188,671,063	205,615,427	218,997,990	244,654,751	272,692,523	304,381,765

NOTES:

\$145.10 million in General Obligation Bonds with a 20-year maturity and a true interest cost of 2.749%; sale closed March 2019. FY19 - the City issued: Ξ

\$82,590,000 in General Obligation Refunding Bonds with a 13-year maturity and a true interest cost of 2.09%; sale closed October, 2019 FY20 - The City did not issue any bonds.

FY21 - the City issued:

\$121,660,000 in General Obligation Bonds with a 20-year maturity and a true interest cost of 1.29%; sale closed December 30, 2020

\$23,885,000 in General Obligation Bonds (Green Bonds) with a 20-year maturity and a true interest cost of 1.82%; sale dosed December 30, 2020

\$35,000,000 in General Obligation Bonds (Federally Taxable, Social Bonds) with a 15-year maturity and a true interest cost of 1.75%; sale closed December 30, 2020

\$29,565,000 in General Obligation Refunding Bonds with a 6-year maturity and a true interest cost of 1.22%; sale closed December 30, 2020

\$61,840,000 in General Obligation Refunding Bonds (Federall y Taxable) with a 13-year maturity and a true interest cost of 1.22%; sale closed December 30, 2020

Assumptions:

FY22 - Assumes General Obligation debt issuance of \$260 million and \$20 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%.

FY23 - Assumes General Obligation debt issuance of \$315 million and \$10 million for the Renew Boston Trust project each with a 20 year maturity and an interest rate of 5.0%. FY24 - Assumes General Obligation debt issuance of \$325 million with a 20 year maturity and an interest rate of 5.0%.

FY25 - Assumes General Obligation debt issuance of \$325 million with a 20 year maturity and an interest rate of 5.0%.

FY26 - Assumes General Obligation debt issuance of \$325 million with a 20 year maturity and an interest rate of 5.0%

Under the American Recovery and Reinvestment Act of 2009 (ARRA), in 2010 and 2011, the City issued Tax Benefited Bonds which are entitled to receive subsidy payments from the Federal Government. An estimated Subsidy reduction to ARRA-related issuances of 7.3% per year from FY2022 through FY2026 has been applied in response to IRS withholding notifications. The IRS has released subsidy reduction notifications since March of 2013, reducing the expected annual subsidy. 62

Debt Service Costs will be offset by the "Fund for Parks and Recreation". 3

- Debt Service Costs will be offset by charging City departments for the space they occupy. 4
- Debt Service Costs will be offset by semi-annual payments from the Retirement Board. (2)
- Quarterly payments of principal in the amount of \$363,636.36 are currently being made to the paying agent with respect to the City's outstanding \$20 million G.O. Qualified School Construction Bonds, 2009-Series A, which were issued as tax credit bonds that do not earn interest. These funds are kept in escrow until the Bonds mature on September 15, 2024.